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Bulletin No. 8 March 17, 1978 Diphtheria in Brevig Mission

On February 14, a 16-month-old child from Brevig Mission was flown to the Norton Sound Regional Hospital where the child suffered a cardio-respiratory arrest and was unable to be resuscitated. The child had been referred because of an upper respiratory infection and possible pneumonia and was noted to have extensive impetiginous lesions. Postmortem exam revealed bilateral broncho-pneumonia but no bacteria could be cultured from the lungs. Spinal fluid was normal, and there was no evidence of meningitis. Cultures of the skin lesions revealed staphylococcus; beta-streptococcus, group A; and diphtheroids. The cultures were forwarded to the SCRO Lab which recovered toxigenic *Corynebacterium diphtheriae* organisms from the child and also from the child's mother. Other postmortem findings were unrevealing.

Review of the child's chart revealed a history of numerous medical problems including staphylococcal dermatitis, conjunctivitis and bacteremia five days after birth which responded to oxacillin treatment. Subsequently, the child was seen numerous times for upper respiratory infections, otitis media, and skin lesions. A review of the child's immunization status revealed documentation of DPT vaccination on 2/18/77, 3/8/77, and 9/77. Further tests are underway to try to determine if the toxigenic diphtheria organisms were the cause of this child's death or whether they were merely present on the skin.

The child's mother had toxigenic organisms recovered from skin lesions. She had been adequately immunized and showed no symptoms of diphtheria. Because of the documentation of the presence of toxigenic organisms, Public Health personnel flew to Brevig Mission where all residents of the village were examined for the presence of sore throat and impetigo, and throat and skin cultures were obtained. Of 74 persons examined and cultured, five persons were found to have group A Beta Strep present on throat cultures. No diphtheria organisms were recovered. Diphtheria-Tetanus or DPT vaccinations were given to all 74 residents of Brevig Mission.

(Reported by Margaret Olanna, Helena Seetot, Health Aids, Piedad Esquivel, RNS, Esperanza Somebang, PHN, Margaret Swanberg, PHN and Mike Moser, M.D., Norton Sound Regional Hospital, Nome)

Daycare Center Immunizations

A cooperative program between Social Services and the Division of Public Health resulted in smooth implementation of new regulations requiring that all children attending daycare centers be vaccinated against diphtheria, tetanus, pertussis, polio, measles and rubella. Tremendous cooperation was received from all daycare center operators, and of course, from the parents. The program was an overwhelming success, and, once again, great pride can be taken in Alaska's Immunization Program. The importance of immunization is particularly underscored by the diphtheria outbreak in Brevig Mission and cases of pertussis which have recently occurred in Juneau and Cordova.

Influenza

Numerous isolates of A/Victoria and A/Texas influenza A virus have been obtained from numerous parts of the State. Influenza illness is still widespread. No strains of the Russian Flu have yet been identified in Alaska. Keep your fingers crossed.